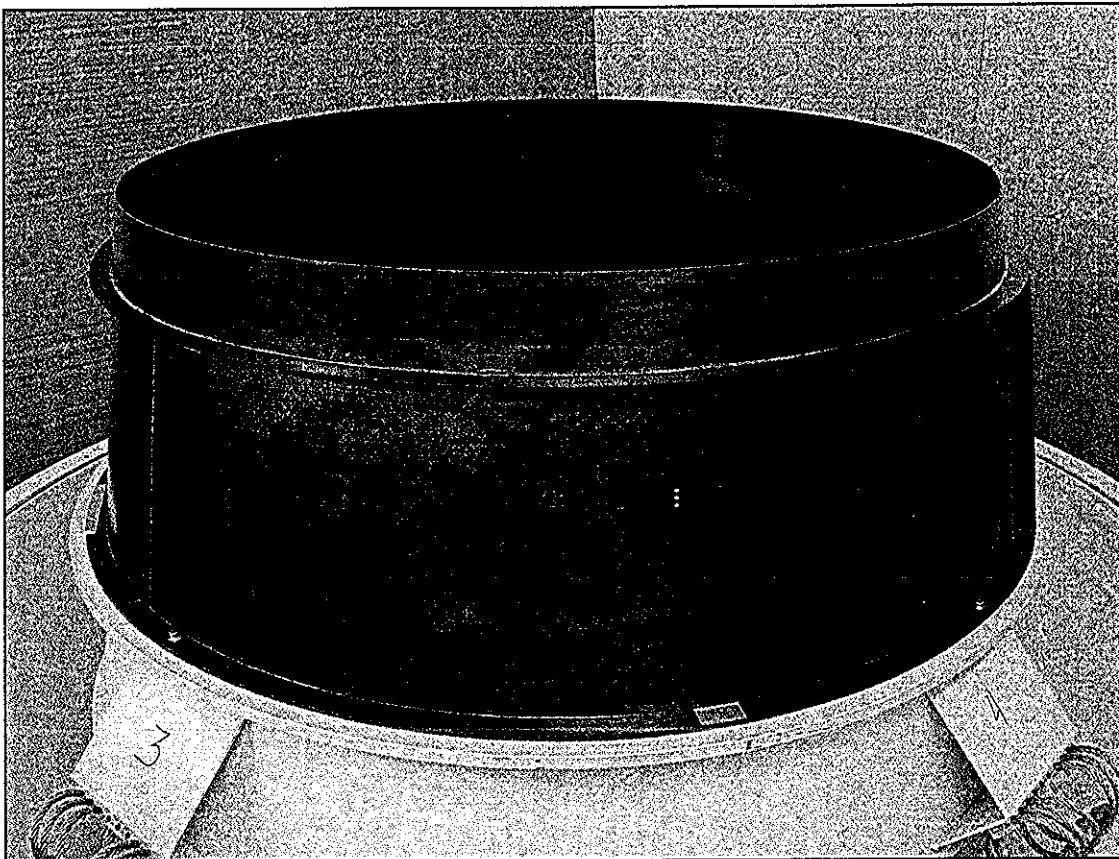
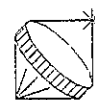


Technical Data Sheet
RICH FM Reflector
Serial Number FM-00102

The following is the technical data sheet for the RICH EM Mirror for the AMS-02. The EM is produced to the dimensions of 1/3 of the final Flight Model mirror. The substrate for the engineering model is comprised of two specific types of prepreg material and a single adhesive material. The following is a description of the FM and the details relating to the materials used in the fabrication of the FM. For specific technical data regarding the materials, see Manufacturers data sheet in *Material Properties*.



Complete Flight Model attached to the container support ring.



FM Total Weight: 8.2 kg

Mirror Substrates, Three (3) Panels

Material: M46J/EX-1515 prepreg, 70grams/m² Fiber areal weight, Bryte Technologies, Milpitas CA., 24-plyes unidirectional, laid up in a $\pi/3$ quasi-isotropic orientation

Flanges

Top

Material: M46J/EX-1515 prepreg, 70grams/m² Fiber areal weight, Bryte Technologies, Milpitas CA., 16-plyes unidirectional, laid up in a $\pi/4$ quasi-isotropic orientation.

Bottom

Material: M46J/EX-1515 prepreg, 70grams/m² Fiber areal weight, Bryte Technologies, Milpitas CA., 24-plyes unidirectional, laid up in a $\pi/3$ quasi-isotropic orientation, 2 layers of 12 sections per layer comprised the lower flange

Inserts

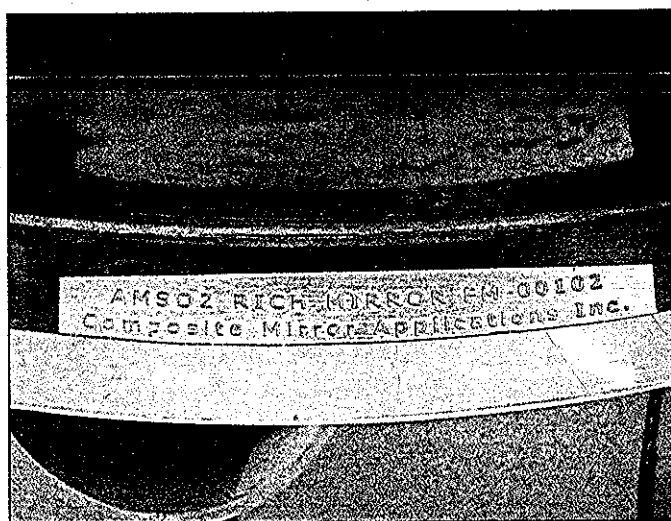
Material: 304 Stainless Steel (See As-built drawings)

Adhesive

Material: Araldite 1210 A/B adhesive

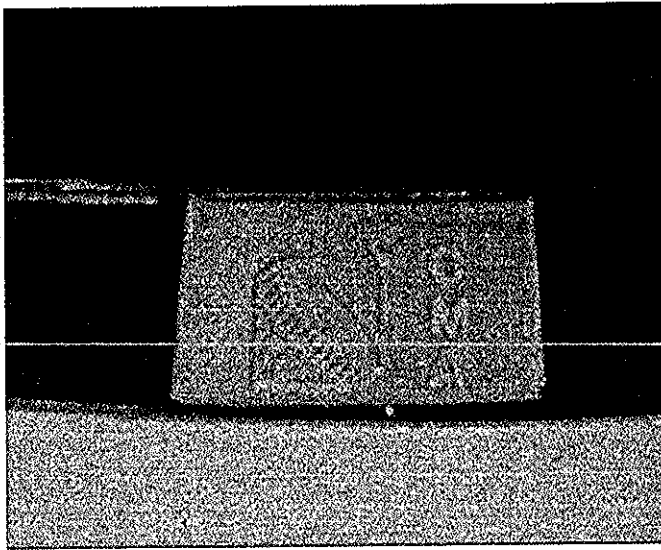
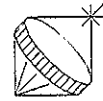
Identification

Images below show the identification engraving for the FM. The markings are located on top of the FM lower flange. The engravings are over coated with aluminum.



Main Identification Marker,
Serial number FM-00102
Fabricated by
Composite Mirror Applications.

Label occurs in one location
only.



CMA Logo Marker

Label occurs at 3 locations on the FM, on top of the bottom flange, 90° apart from each other.

Each of the 3 mirror sections is marked with a small white circular mark to identify their position on the FM.

Mirror Section Gaps

The vertical gaps between the mirror sections have been measured to the following.

Between 1 and 2	0.305 mm
Between 2 and 3	0.127 mm
Between 1 and 3	0.203 mm